
UNITED STATES MARINE CORPS
THE BASIC SCHOOL
MARINE CORPS TRAINING COMMAND
CAMP BARRETT, VIRGINIA 22134-5019

HUMAN FACTORS

B120125DXQ-DM

STUDENT HANDOUT

Human Factors

Introduction

This lesson focuses on the human factors of fatigue (mental and physical), fear, cohesion, and the will of the commander. All Marines, regardless of military occupational specialty (MOS) will experience these at some point in their career. The goal is to give you a context in which to deal with these factors when they present themselves.

Importance

Man is the dominant force in warfare and has been since the beginning of time. John Keegan in The Face of Battle articulates beautifully through accounts of Agincourt, Waterloo, and the Somme that regardless of whether you are employing the crossbow, artillery, or the machine gun, man is the central theme; and he is susceptible to human factors of combat. Man and his will on the battlefield will carry the day. This lesson is a formal study of these human factors that Marine officers have to deal with while leading Marines in combat.

In This Lesson

This lesson gives you a detailed study of how the human factors experienced in combat affect your decision making and how understanding these factors will allow you to better employ your Marines in combat.

This lesson covers the following topics:

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Human Factors (Continued)

Learning Objectives

Terminal Learning Objectives

TBS-LDR-1019 Given an evaluation, define the role of leadership in overcoming fear without omission.

TBS-LDR-1017 Given an evaluation, define core leader functions to alleviate stress without omitting key components.

TBS-LDR-1016 Given an evaluation, identify the elements of combat without omitting key components.

Enabling Learning Objectives

TBS-LDR-1016a Given an evaluation, define combat without error.

TBS-LDR-1016b Given a combat scenario, plan to mitigate the impact of the elements of combat on individual Marines to accomplish the mission and take care of Marines.

TBS-LDR-1016c Given a combat scenario, strengthen resilience of Marines against the elements of combat to accomplish the mission and take care of Marines.

TBS-LDR-1016d Given an evaluation, define the five stresses of combat without omission.

TBS-LDR-1017a Given an evaluation, identify actions a leader can take before combat to mitigate the impact of human factors on Marines.

TBS-LDR-1017b Given an evaluation, identify actions a leader can take during combat to mitigate the impact of human factors on Marines.

TBS-LDR-1017c Given an evaluation, identify actions a leader can take after combat to mitigate the impact of human factors on Marines.

TBS-LDR-1019a Given an evaluation, identify ways to foster morale without omission.

TBS-LDR-1019b Given an evaluation, identify ways to foster discipline without omission.

TBS-LDR-1019c Given an evaluation, identify ways to foster esprit de corps without omission.

TBS-LDR-1019d Given an evaluation, identify ways to foster proficiency without omission.

TBS-LDR-1019e Given an evaluation, identify ways to foster motivation without omission.

Factors Impacting Decision Making in Combat

Human Factors A multitude of factors affect decision making in combat. Researchers have divided them into these categories:

- Endogenous: Those factors that affect Marines from within.
- Exogenous: Those factors affecting Marines externally.
- Transitory: Factors that may be mitigated by training.
- Enduring: Factors that may be mitigated by education.

The table below gives examples of the factors in these categories.

	Transitory	Enduring
Endogenous	<ul style="list-style-type: none"> • Confinement • Emotion • Fear • Isolation • Mental and physical fatigue • Sleep loss • Stress • Surprise • Uncertainty 	<ul style="list-style-type: none"> • Cognitive factors • Cohesion • Comradeship • Discipline • Initiative • Leadership • Will • Combat • Experience
Exogenous	<ul style="list-style-type: none"> • Weather • Darkness • Violence • Leadership • Soldier's load • Suppression 	<ul style="list-style-type: none"> • Terrain • Environment • Coordination

Factors Impacting Decision Making in Combat (Continued)

Physiological Response to Stress

Humans have two systems that help them respond to stress:

- Sympathetic nervous system (SNS).
- Parasympathetic nervous system (PNS).

The PNS manages your body's digestive and recuperative energy while the SNS mobilizes your body's energy for action. Normally these two systems are balanced, but during extremely stressful circumstances, the body's fight-or-flight response kicks in. The SNS mobilizes all available energy for survival, thus leaving little to no energy left for the PNS, often resulting in non-essential activities such as digestion, bladder control, and sphincter control to shut down.

Combatants pay a physiological price for an energizing process this intense. This price has an equally powerful backlash when the neglected demands of the PNS return. This "PNS backlash" occurs as soon as the stressor is removed and takes the form of an incredibly powerful weariness and sleepiness on the combatant's part.

Combat Defined

The Marine Corps defines combat as "*engaging the enemy with individual or crew served weapons; being exposed to direct or indirect enemy fire; and otherwise undergoing a high probability of direct contact with enemy personnel and firepower, to include the risk of capture.*" (MCRP 6-11C)

The nine common elements found in the combat environment are:

1. Confusion and lack of information.
2. Casualties.
3. Violent, unnerving sights and sounds.
4. Feelings of isolation.
5. Communication breakdowns.
6. Individual discomfort and fatigue.
7. Fear, stress, and mental fatigue.
8. Continuous operations.
9. Homesickness.

Combat Defined (Continued)

All of these common elements cause stress, which manifests in combat. The Marine Corps identifies five stresses of combat:

- Boredom.
- Fog of war.
- Casualties.
- Discomfort and fatigue.
- Extreme risk and fear.

Boredom

Combat has short periods of intense terror followed by long periods of inactivity. Marine leaders must be able to manage these periods of boredom to battle the complacency that can set in during these long periods of inactivity.

Fog of War

The fog of war (confusion, or the unknown) affects every participant from the newest private to the four-star general. Marine leaders can help mitigate the fog of war by keeping their Marines informed.

Casualties

Even if leaders do everything correctly, Marines can still get injured or killed. Taking the time to ensure that Marines appropriately deal with “cherry pickers” (simulated casualties) during training helps them to be prepared to deal with casualties in combat. In addition, realistic casualty training develops confidence in your Marines and their unit, so they know that they will be taken care of if they are injured or killed.

Discomfort and Fatigue

Marines experience some of the most dreadful conditions humans ever have to endure. Sleep deprivation, lack of food, and experiencing the impact of the elements quickly wears on individuals who are not prepared both physically and mentally for the demands of combat. Marine leaders must ensure their Marines endure discomfort and fatigue first in training, prior to experiencing them in a combat zone. Marines must be exposed to these stresses gradually, but leaders must manage this risk through the use of operational risk management (ORM).

Combat Defined (Continued)

Extreme Risk and Fear Factors that mitigate fear are:

- Morale.
- Discipline.
- Esprit de corps.
- Proficiency.
- Motivation.
- Training.

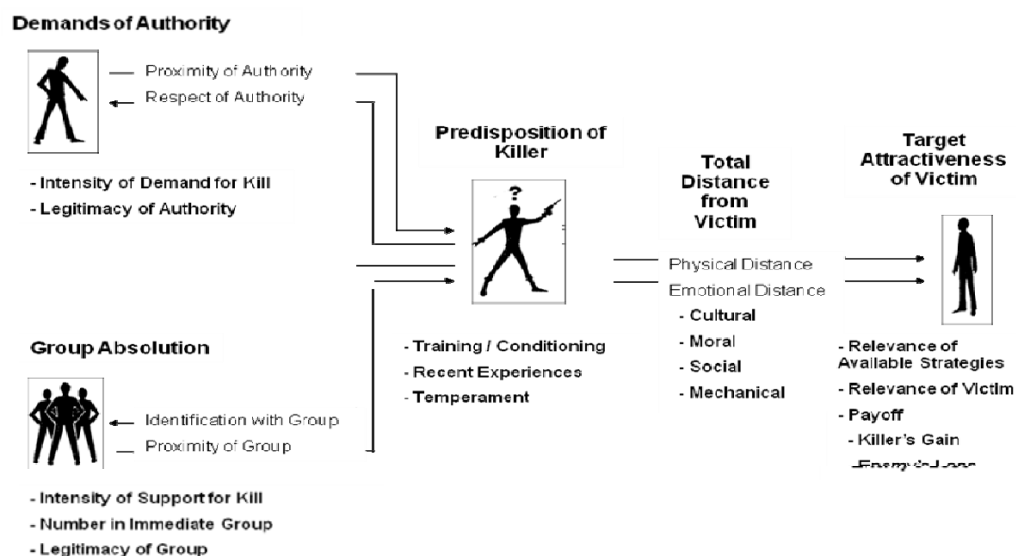
Ensuring that these factors are ingrained into your unit will ensure that Marines are accustomed to aspects of the fear that they will face in combat.

Killing in Combat

Getting Marines to Kill

Killing and getting our Marines to kill are a part of our job as Marine leaders. How can we train Marines to kill? Through classical conditioning; Using targets that look like humans on the rifle range, dehumanizing the enemy, and bayoneting dummies.

Lieutenant Colonel Grossman's book, On Killing, provides an excellent study of killing and the human response and is highly recommended reading for all Marine officers.



Attributes of the Commander

Physical courage, intellect, and character are three common attributes that combat veterans have said need to be present for a commander to be successful.

Physical Courage

As leaders, you must be able to withstand the physical rigors of war. You cannot hide from physical danger and expect to inspire your troops. Physical strength is a part of this. As leaders, you must be strong enough to meet the physical demands of your job so that you will not be worn down when the time comes to take action. Physical fitness also helps ward off infections and diseases. Sharing physical danger and hardship with your Marines enhances your credibility and inspires confidence. Does that mean you run on the front line and literally lead your platoon from the front? Probably not, but leaders must be positioned to have the best control of the unit; the front line in direct engagement is usually not the place for that. Lead at the front and be prepared to insert your will at the point of friction; however, there may come a time when *you* must be able to provide physical corrective action and have that physical courage to get a stalled unit moving again in the attack.

Military Intellect

You must be skilled and trained in the tactics, and techniques of the profession of arms. From an infantry officer understanding how to properly execute an infiltration, a motor transportation officer able to conduct a motorized convoy and to a communications officer understanding tactical employment of command control equipment you must master your skill set and understand how it fits within the larger scope of an operation. The mastery of your profession will undoubtedly save the lives of your Marines by setting conditions for their success while contributing to the destruction of the enemy. More importantly you must possess a level of intellect that allows you to analyze a situation in an environment of uncertainty and make decisions utilizing sound judgment, rapidly. Intellectual attributes are not necessarily academic prowess. It is the ability grasp what is important and what is not within the given situation. It is the ability to think rapidly and critically then apply a level “tactical cunning” to accomplish the mission. You must be aggressive in your decisions and possess an unwavering “bias for action.”

You are now in the profession of arms, and you must treat it as a profession that requires large amounts of self-study to ensure you make the best decisions on the battlefield.

Character

Character is the ability to keep your head at times of great stress and violence. A strong character is one that will not be unbalanced by the most powerful emotions. Keeping calm is essential to thinking clearly and helps control the

debilitating impact of fear. Overwhelmed by fear, you cannot make a decision. A sense of human dignity is an essential element of character as well. You must be able to measure out violence through your unit/Marines on the enemy within the rules of engagement (ROE). Be the commander that has the will to train through and operate with and against human factors.

Dealing with Combat Stress

Leader Actions

Marine leaders always have two responsibilities:

- Mission accomplishment.
- Troop welfare.

Certain steps leaders can take before, during, and after deployment minimize the effects of combat stress on their units.

Pre-Deployment

Some actions that small unit leaders can take to minimize the effects of combat stress before a deployment to a combat zone are

- Conduct unit training.
 - Hard realistic training (tactically, technically, physically) is the primary technique for preventing combat stress.
 - Marines must have confidence in their leaders, training, unit, and equipment.
 - Educate yourself and your Marines on human factors in combat.
 - Train for casualties. Combat first aid builds confidence. Educate Marines on the procedures for:
 - Notification of next of kin (NOK).
 - Medical evacuation (MEDEVAC).
 - Wounded in action (WIA).
 - Killed in action (KIA).
 - Focus training around building unit cohesion and team building. Every Marine has a place on the team.

Dealing with Combat Stress (Continued)

Pre-Deployment (Continued)

- Prepare for changed sleep schedules and jet lag.
 - Plan sleep and rest plan before deploying.
 - Attend to task assignments and allocations.
 - Avoid causing stress in your Marines by not overloading them with responsibilities before deploying.
 - Select the right person for each job. Fit the right person to the task based on the requirement and the Marine's talents and abilities.
 - Duplicate critical tasks. Assign two Marines to crucial tasks that require mental alertness and complete accuracy. These Marines check each other's work by performing the same task independently.
 - Cross train each Marine in a secondary duty position to step completely into the position of another Marine.
 - Develop standard operating procedures (SOPs), checklists, and other mental aids to simplify critical tasks during periods when alertness is low.
- Attend to personal and family matters. Ensure your Marines have their lives in order spiritually, financially, emotionally, etc.
 - Make or update wills.
 - Finalize power(s) of attorney (POAs) for family members.
 - Update life insurance policies, including SGLI.
 - Ensure family automobiles are in good repair or stored appropriately.
 - Develop lists of telephone numbers of reliable points of contact for specific issues (mechanics, emergency transportation, babysitters, emergency funds, health care, etc.).
 - Resolve major legal issues such as alimony, property settlements after divorces, child support payments, etc.

Dealing with Combat Stress (Continued)

Pre-Deployment (Continued)

- Conduct unit responsibilities.
 - Brief families as a group, within the bounds of operational security, as to the nature of the mission.
 - Establish a key volunteer network (KVN) for communication among families.
 - Establish working relationships between the units remaining behind and the KVN.
 - Have mental health professionals talk to families in order to identify problems that might occur during and after deployment.

During Deployment

The key to battling combat stress during deployment is to know what signs to look for in your Marines. Once you have identified Marines who could possibly be suffering from combat stress, you can better take corrective action.

Be confident and decisive. Your leadership directly impacts your unit's morale and combat effectiveness.

Encourage and talk to your Marines about non-mission related subjects.

Use the following tables to identify early warnings to problems. Most or all of the mild battle fatigue symptoms are present in normal, mild battle-fatigued Marines in combat, yet they still do their jobs.

Dealing with Combat Stress (Continued)

During Deployment (Continued)

Mild Battle Fatigue Symptoms	
Physical Signs	Emotional Signs
<ul style="list-style-type: none"> • Tears. • Cold sweats • Increased heart rate. • Nausea, vomiting, diarrhea. • Mild fatigue. • Brief “thousand-yard stare”. 	<ul style="list-style-type: none"> • Anxious; indecisive. • Irritable. • Forgetful; unable to concentrate. • Insomnia; nightmares. • Grief. • Anger; beginning to lose confidence. • Difficulty focusing or communicating.
Serious Battle Fatigue Symptoms	
Physical Signs	Emotional Signs
<ul style="list-style-type: none"> • Constantly moves around. • Flinches or ducks at sudden sound or movement. • Shakes, trembles. • Cannot use part of body for no physical reason. • Cannot see, hear, or feel. • Is physically exhausted. • Uncontrolled crying. • Freezes under fire or is totally immobile. • Stares vacantly without response. • Staggeres, sways when standing. • Panics; runs under fire. 	<ul style="list-style-type: none"> • Night terrors • Talks rapidly and/or inappropriately. • Is argumentative; acts recklessly. • Inattentive to personal hygiene. • Indifferent to danger. • Memory loss. • Stutters severely, mumbles, or cannot speak at all. • Insomnia; nightmares. • Sees or hears things that do not exist. • Rapid emotional shifts. • Socially withdrawn. • Apathetic. • Hysterical outbursts. • Frantic or strange behavior.

Dealing with Combat Stress (Continued)

During Deployment (Continued)

Treat Marines showing battle fatigue using the BICEPS guideline:

- Brevity: Treatment lasts no more than three days. Those who require further treatment are moved to higher level of care.
- Immediacy: Provide care as soon as symptoms appear.
- Centrality: If possible, treat combat stress cases in one location near but separate from the BAS (Battalion aid station). Marines continue to think of themselves as Marines, rather than patients (sick people).
- Expectancy: The unit and the Marines' small unit leaders tell Marines that their comrades need and expect them to return and that they will only be off the lines for a couple of days.
- Proximity: Care for Marines suffering from battle fatigue that has turned into combat stress as close as possible to the Marines' parent units.
- Simplicity: Deep psychoanalytic work is not done. Treatment is kept simple to restore the Marines' psychic defense mechanisms so that they function and return to duty again.

Conduct thorough debriefs after every mission. Discuss tactics involved and lessons learned. Hold debriefs at smaller levels to discuss the human factors associated with that mission:

- Engagements/killing.
- Friendly casualties/casualties of war.

Take corrective action.

Maintain the high standards expected of US Marines. Do not allow discipline to slack:

- Personal hygiene.
- Proper wear of the uniform.
- Clean weapons daily.
- Clean magazines weekly.

Dealing with Combat Stress (Continued)

During Deployment (Continued)

Conduct physical training:

- Retain unit cohesion.
- Relieve stress.
- Do not run your Marines into the ground. They will be combat conditioned on their return, not physical fitness test (PFT) conditioned.

Integrate combat replacements:

- Ensure they are made part of the team, not ostracized.
- Ensure no rights of passage/hazing of new Marines occurs.

Post-Deployment

The job is not finished at the conclusion of the deployment. Leaders must continue to take active roles in the welfare of their Marines' mental health:

- Warrior Transition: The unit conducts training before returning home. This is vital on the modern battlefield since the Marines can return home within 72 hours of conducting combat operations.
- Counseling: Prevent/identify combat stress. If you change billets, do not forget about your old Marines.
- Physical Training: Emphasize unit cohesion. Use it to relieve, not cause, stress. Understand that your Marines will not be in the best PFT shape and need to slowly build back up to a higher level of physical fitness.
- Small Unit Training: Focus on the basics, individual and fire team skills.
- Chaplain/Medical Officer: If you suspect your Marines are suffering from combat stress, refer them to the Chaplain. If the Chaplain concurs, your Marines should see the Medical Officer who evaluates each one. If the Medical Officer concurs, the Medical Officer schedules appointments for your Marines to see a psychiatrist who will actually diagnose and treat the Marines' condition.

Summary

Remember these points:

- Man is subject to human factors that apply equally to the enemy as well as friendly troops.
- Marines can be inoculated against these factors. Marines must face them in training to avoid first exposure in combat.
- As a leader, you must use physical courage, intellect, and will power to mitigate human factors.
- As a leader, you must understand the steps you can take before, during, and after deployment to minimize the effects of combat stress on your Marines and your unit.

References

Reference Number or Author	Reference Title
NAVMC 2767	User's Guide to Marine Corps Leadership Training
MCCS Handbook	Marine Corps Common Skills Handbook, Book 1A, Chapter 8
MCRP 6-11c	Combat Stress
Axelrod, Allen	Patton on Leadership
Chang, Iris	The Rape of Nanking
Ghiglieri, Michael	The Dark Side of Man
Grossman, Dave, Lieutenant Colonel	On Killing
Holmes, Richard	Acts of War
Marshall, SLA	Men Against Fire
McCoy, B. P., Colonel	Passion for Command
Sledge, E. B.	With the Old Breed
Von Schell, Adolf, Captain	Battle Leadership

Glossary of Terms and Acronyms

Term or Acronym	Definition or Identification
BAS	Battalion Aid Station
Combat stress	The <i>expected and predictable</i> emotional, intellectual, physical, and/or behavioral reactions of service members who have been exposed to stressful events in war or military operations other than war.
KIA	Killed in action
KVN	Key volunteer network
MEDEVAC	Medical evacuation
NOK	Next of kin
ORM	Operational risk management
PFT	Physical fitness test
PNS	Parasympathetic nervous system
ROE	Rules of engagement
SGLI	Servicemembers' Group Life Insurance
SNS	Sympathetic nervous system
WIA	Wounded in action

Notes
